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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/570,023	03/01/2006	Sureshchandra B. Patel		1118

7590
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CANADA

11/24/2008

EXAMINER

BARNES-BULLOCK, CRYSTAL JOY

ART UNIT	PAPER NUMBER
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2121

MAIL DATE	DELIVERY MODE
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11/24/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/570,023	PATEL, SURESHCHANDRA B.	
	Examiner	Art Unit	
	Crystal J. Barnes Bullock	2121	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 9-11 is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☒ Claim(s) 4 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 June 2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The following is an initial Office Action upon examination of the above-identified application on the merits. Claims 1-11 are pending in this application.

Priority

2. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Canada on 3 September 2002. It is noted, however, that applicant has not filed a certified copy of the 2,400,580 application as required by 35 U.S.C. 119(b).

Information Disclosure Statement

3. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609.04(a) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

Claim Objections

4. Claim 4 is objected to because of the following informalities:
system/method should be system. Appropriate correction is required.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1, the term "etc." renders the claim(s) indefinite because the claim(s) include(s) elements not actually disclosed (those encompassed by "etc."), thereby rendering the scope of the claim(s) unascertainable. See MPEP § 2173.05(d).

Allowable Subject Matter

7. Claims 9-11 are allowed.

8. Claim 1 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

9. Claim 2-8 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

10. The following is a statement of reasons for the indication of allowable subject matter:

As per claim 1, the prior art of record taken alone or in combination fails to teach performing Loadflow computation at said nodes of the power system by a Super Super Decoupled computation in any of the Super Super Decoupled Loadflow methods or any of their hybrid combination or simple variants employing corresponding gain matrices derived from a super decoupled Jacobian matrix for real power with respect to angle and a super decoupled Jacobian matrix for reactive power with respect to voltage, and involving triangular factorization of said gain matrices and computing of discrepancy of real power and reactive power from specified values through such nodes, said computing including introducing

variables representing quotients of the transformed discrepancies from specified values of real and reactive power flowing in through each node divided by voltage, or square of the voltage in case of transformed real power mismatches in methods employing (1.theta., 1V) iteration scheme, on each node, and using such variables to calculate values of angle and voltage for said transformed discrepancies from specified values of real and reactive power flowing in through each node, by using triangular factorization of said gain matrices for real and reactive power and restricting nodal transformation angle to maximum -48 degrees, applied to complex power injection in computing said transformed discrepancies from specified values of real and reactive power flowing in through each node.

As per claim 9, the prior art of record taken alone or in combination fails to teach controlling the operation of the excitation element of at least one machine to produce or absorb the amount of reactive power indicated by any of the said Super Super decoupled models with respect to the set of specified parameters.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following references are cited to further show the state of the art with respect to electrical power system regulation:

USPN 7,096,175 B2 to Rehtanz et al.

USPN 7,096,165 B2 to Pantenburg et al.

USPN 6,754,597 B2 to Bertsch et al.

USPN 6,690,175 B2 to Pinzon et al.

USPN 6,313,752 B1 to Corrigan et al.

USPN 5,610,834 to Schlueter

USPN 5,566,085 to Marceau et al.

USPN 5,305,174 to Morita et al.

USPN 5,081,591 to Hanway et al.

USPN 4,974,140 to Iba et al.

USPN 4,868,410 to Nakamura

US Pub. No. 2007/0203658 A1 to Patel

WO 2004/023622 A2 to PATEL

CA 2107388 A to PATEL

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Crystal J. Barnes Bullock whose telephone number is 571.272.3679. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert Decady can be reached on 571.272.3819. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Crystal J. Barnes Bullock/
Primary Examiner, Art Unit 2121
21 November 2008